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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,651	11/21/2003	Walter Demuth	016906-0296	9147

22428 7590 03/29/2006

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EXAMINER	
JIMENEZ, MARC QUEMUEL	
ART UNIT	**PAPER NUMBER**
3726	

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,651	DEMUTH ET AL.	
	Examiner	Art Unit	
	Marc Jimenez	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/051,374.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11-21-03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: - - now patent number 6,772,518 - - should be entered after "January 22, 2003" in the first line of the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-3 and 5-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumann et al. (US5737952) in view of Hada et al. (US6098441) and Damsohn et al. (US5743329)

Baumann et al. teach a method of forming at least one flat-tube insertion slot **29** in a heat exchanger header tube **5** suitable for use in an air-conditioning system, comprising:

configuring the flat-tube insertion slot **29** by punching with a slot punch **10**, the slot punch **10** to thereby form a rimmed insertion slot **29** to thereby form a rimmed insertion slot **29** having a rim on at least a portion of its periphery extending into the interior of the header tube **5**.

Baumann et al. teach the invention cited above with the exception of making a sawcut in the header tube and punching into the region of the sawcut with the slot punch **10**. Baumann et al. also do not teach cutting to a depth which is less than the wall thickness of the tube as recited in claim 2.

Hada et al. teach making a cut **2** in a tube **1** (fig. 1 and col. 3, lines 24-27) and then punching into the region of the cut **2** with a slot punch **7** to create a rim **5** which extends into the interior of the tube **1**. Hada et al. also teach cutting to a depth which is less than the wall thickness of the tube **2,3** (fig. 1), the cut **2,3** is made in a direction transverse to the axis of the tube, and the cut is substantially linear and has a first length and first width.

Damsohn et al. teach that it is known to cut a pipe with a sawcut (col. 3, lines 2-3).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Baumann et al. with the steps of making a cut in the header tube and then punching into the region of the cut with a slot punch, cutting to a depth which is less than the wall thickness of the tube, cutting on a direction transverse to the axis of the tube, and wherein the cut is substantially linear and has a first length and first width, in light of the teachings of Hada et al., in order to reduce the shear droop of the formed rim as suggested by Hada et al. at col. 1, lines 40-44.

Although Hada et al. teach that the cutting is performed by press-cutting, round-cutting, or cutting or grinding with a tool, Hada et al. do not explicitly teach that the cutting is by the claimed "sawcut".

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Baumann et al./Hada et al. with a sawcut, in light of the teachings of Hada et al., in order to utilize a cutting technique that accurately and symmetrically forms the desired cut.

Regarding claim 3, Baumann et al./Hada et al./Damsohn et al. teach the invention cited with the exception of the sawcut being made in a direction parallel to the axis of the header tube.

At the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have made the sawcut parallel to the axis because applicant has not disclosed that a parallel cut provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicants invention to perform equally well with either the transverse sawcut of the prior art or the claimed parallel sawcut, because both sawcuts perform the same function of providing attachments for heat exchange tubes.

Regarding claim 5, the sawcut is substantially linear and has a first length and first width (see for example, figure 1 of Hada et al.).

Regarding claim 6, the header tube has a "comparatively thick wall thickness".

Regarding claim 7, Damsohn et al. teach making a sawcut which inherently is made by a saw blade having a predetermined diameter and width.

4. **Claims 4 and 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Damsohn et al. in view of Hada et al.

Damsohn et al. teach making a sawcut **3** (fig. 11b and col. 7, lines 7-8) in a header tube, and configuring the flat-tube insertion slot **3** by punching into the region of the sawcut **3** with a slot punch **31**.

Damsohn et al. teach the invention cited above with the exception of the sawcut being introduced to a depth which is less than the wall thickness of the header tube.

Hada et al. teach cutting to a depth which is less than the thickness of the tube (col. 3, lines 24-27 and **2,3** fig. 1).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Damsohn et al. with a sawcut introduced to a depth which is less than the wall thickness of the header tube, in light of the teachings of Hada et al., in order to help reduce the amount of chips that may go into the pipe as suggested by Hada et al. at col. 1, lines 35-39.

Regarding claim 8, the sawcut is substantially linear and has a first length and first width (see for example, figure 1 of Hada et al.).

Regarding claim 9, the header tube has a "comparatively thick wall thickness".

Regarding claim 10, Damsohn et al. teach making a sawcut which inherently is made by a saw blade having a predetermined diameter and width.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,772,518. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of claims 1-10 of the instant application can be found in claims 1-16 of the '518 patent.

The differences between claim 1 of the application and claim 1 of the patent lies in the fact that the patent claim includes more elements and is thus more specific. Thus the invention of claim 1 of the patent is in effect a "species" of the generic invention of claim 1. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d

2010 (Fed. Cir. 1993). Since claim 1 of the instant invention is anticipated by claim 1 of the patent, it is not patentably distinct from claim 1 of the patent.

Claim 2 of the instant application can be found in claim 2 of the patent.

Claim 3 of the instant application can be found in claim 3 of the patent.

Claim 4 of the instant application can be found in the combination of claims 1 and claim 2 of the patent. The differences between claim 4 of the application and claims 1/2 of the patent lies in the fact that the patent claims include more elements and is thus more specific. Thus the invention of claim 4 of the patent is in effect a "species" of the generic invention of claims 1/2. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since claim 4 of the instant invention is anticipated by claim 1/2 of the patent, it is not patentably distinct from claim 1/2 of the patent.

The features of claims 5 and 8 can be found in claim 1 of the patent which uses a saw to create the sawcut.

Claims 6 and 9 can be found in claim 6 of the patent.

Claims 7 and 10 can be found in claim 7 of the patent.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Nguyen can be reached on (571) 272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Jimenez, Primary Examiner
Art Unit 3726

MJ
3-27-06